1/2
SEQUENCE LISTING

<110> PHARMACIA & UPJOHN S.P.A.

<120> PROCESS FOR PREPARING DOXORUBICIN

<130> 1615-9003

<140> PCT/UNKNOWN
<141> 1999-04-22

<150> 09/065,606
<151> 1998-04-24

<160> 1

<170> PatentIn Ver. 2.0

<210> 1
<211> 2870
<212> DNA
<213> Streptomyces peucetius

<220>
<221> misc_feature
<222> Complement((1)..(2870))
<223> Complementary strand to the coding strand

<400> 1

```
ggatccgcac cgggtacacg gcacgggacc gcccaccgcg cggtgcgcgg tgggcggtcc   60
cgtgccggtc gcggccggcg gatcagcgca gccagacggg cagttcggtg agccgcgccg  120
tctgggcccc cttccggcac caccgcaact cgtcgtacgg cacggccagt cgggcctcgg  180
ggaacctgct cgcagtacg ccgatcatcg tgcgcgactc cagctgggcg agctgctccc  240
cgatgcagta gtgcggcccg tcgccgaagg tgagccgccg ccacgaggga cggtccgggt  300
ggaaggcgtg cggggcgtcg tgatggcggc cgtcggtgtt ggtgccctcg atgtccacca  360
gcaccggcgc tccgcggggc agccggacgc cgccgatggt cacctccgtg cagcgaacc   420
tccacaacgt gtagggcacc ggcgggtggt agcgcagcgc ctcctccacg aaccgggaga  480
cggcgtcctc gtcggcatcc gccgcgaggc ggcccgccag gacctccgcg agcaggaagc  540
ccaggaagga gccggtggtg tcgtggccgg cgaagatgag cccggtgatc atgtagacga  600
gctggtcgtc ggagaccgag ccgaactcgg cctgcgcgcg ctcgtacagc acgcgggtca  660
tggtcggggt gtcgttccgc cgggctgagt gcacggcttc gaggagcagg ctctccaggg  720
ccgaggtgtc cggcacgccc ccggcagggt ccgtgccgtc accccgccg ctctgcgggc  780
cgccgaggcc gagtgccttg agaacgctga cggcctcgcg ggccatcgcc ggatcggtga  840
ccggcacacc gagcagctcg cagatgacca acagcgggaa gtggtacgcg aagccgccga  900
tcagctcggc cggtttgccc gaccggccgg aggcgtcggc gagttcggtg agcagccggc  960
cggcgatcgc ggcgatgcga tccgtccgct cggccagccg cgcgcgggttg aacgcaggtg 1020
cgtggatgcg gcgcaggcgc cggtgggcct cgccgtccac ggcgatgagc gtgaacggac 1080
gcagctccgg aacggggatg tcgagaccgt cgtccacccc cgccaggcg cgggggcga  1140
ggtcggggtc cttcacgaac cggggatcgg ccagcacctc gcgggcgagg gcgtcatcgg 1200
tgatgaccca ggcgggtccg cccgcggggg cgttcacctc gacgaccggg cccgcctccc 1260
ggaaggcgtc gtgcacctcg ggcttgcgct gcatggtcat catgggacac gcgaacgggt 1320
cgacggccac ccggggcgcc tcgccgctca cgaggcaccg cccgccgccg cggggtaccc 1380
ctccgcagt tcgaccaccg agaagccggc cccgtgcggg tcgagcaggt ccgccgccg  1440
cccctgggc gtgtcggcgg gctcgttctc gacggagccg ccgagttcaa cggcgcgccg 1500
gaccgtcgcg tcgcagtcgt gcacggcgaa cagcacggcc cagtgcggcc gtaccgcgcc 1560
ggtgacgccc agctcctggg tgccggcgac cggcgtgtca ccgatgtgcc agaccgggtc 1620
ggtgacgccc ttcagtccgg tgtcggccgg agccaggccg agggtcgccg ggtagaagtc 1680
ccgggcggcc ccgatgccgt cggtcaccag ctcgacccag ccgaccgagc cgggcacgcc 1740
cgtcacctcc gcgccctcca tgactccctt gcgccagacc gcgaacgcgg ccccggcggg 1800
gtcggcgaag accgccatcc ggccgaggcc gaggacgtcc atcggagtca tgatgacctc 1860
gccgcccgcc gtctcgaccc gcttggtcag tgcgtcggcg tcgtcggtgg cgaagtacac 1920
ggtccagatg gccggcatgc cgtgctggtc gttcccgggc ccgtacggcc ggtggtaggg 1980
```

```
ggtgtcgatc tggtggcggg cgaccgcggc gaccagcttc ccgtcggagc tgaacgtcgt 2040
gtatcccccg gcgcccgggt cgctgaccac ggtggcggtc cagccgaaca ggccggtgta 2100
gaagtcggcc gaggcggcga catcgggcga accgaggtcg aaccatgcgg gggcgccggg 2160
cgcgaacctg gtcacgaatc gttcctttcg atggatcggc acacgagcgt ctgcgctcgc 2220
ggatgagacg gacatctcgc ggatgagacg gacatgcggg cggggcgggc cgccgccgtc 2280
agtgcgcggt gtcgccgacg gcggccgcgc cggcctccca gagcttcgcc gcgaggccgg 2340
cgtcggcggt cgggccgctc accggggaca gccgccggtc gctgtagtag ccgcccgtgg 2400
tcaactcctc ggccggcgcg gacgccagcc acacgagggt gtcggcgccc ttcgccgcgg 2460
agcgcaggaa ggggttgaac cggaagtagg acgaggcgac cgtgccccgt ccgatgcggg 2520
tgcggacctc accggggtga tagctgaccg ccagcacgtc cggccagcgc ctggcggcct 2580
ccgccgcggt catgatgttg gcctgtttgg acgtgccgta cgcctggccg gcgctgtagc 2640
ggtgacggtc gccgttgagg tcgtccgggt cgatccggcc ctgggtgtac gcgtcggacg 2700
aggtgaggat cagccgcccg cccgcgagcc gctcccgcag cagccgtgcc agcaggaagc 2760
ctgcgaggtg attgacctgg atggtggcct cgaacccgtc ctgggtcgtg gtgcgcgacc 2820
agaacatgcc gccggcgttg ctggccatga catcgatgcg cgggtaccgg           2870
```